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FIG. 1

FIG. 2

300 → **SERVICE PROCESSOR CARD**

| QUEUE | 322

RESET LINE

324

308

302

PROCESSOR CARD	**MEMORY CARD**	**I/O CARD**
MICROCONTROLLER AND MEMORY	MICROCONTROLLER AND MEMORY	MICROCONTROLLER AND MEMORY
310 312	314 316	318 320
SYNC BITS	SYNC BITS	SYNC BITS

FIG. 3

304

306

FIG. 3

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400 → (START)

402 → RECEIVE SOFTWARE COMMUNICATION REQUESTS

404 → SUBMIT COMMUNICATION REQUESTS TO A QUEUE

406 → RECEIVE RESET REQUESTS TO RESET A CARD VIA A HARDWARE RESET

408 → SUBMIT RESET REQUESTS TO THE SAME QUEUE TO GAIN HARDWARE ACCESS

FIG. 4

AUS920030475US1
Broyles et al.
Method, System, and Product for Serializing Hardware Reset
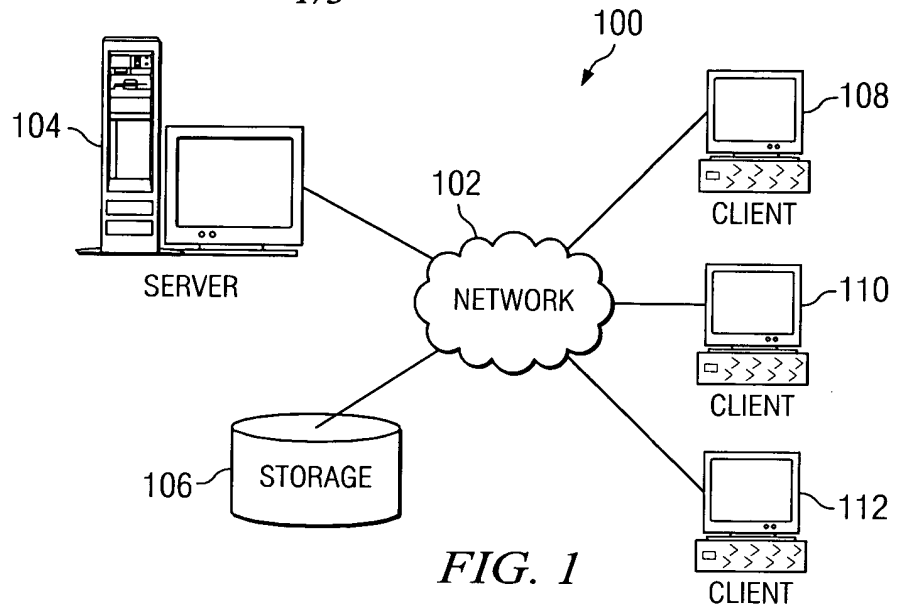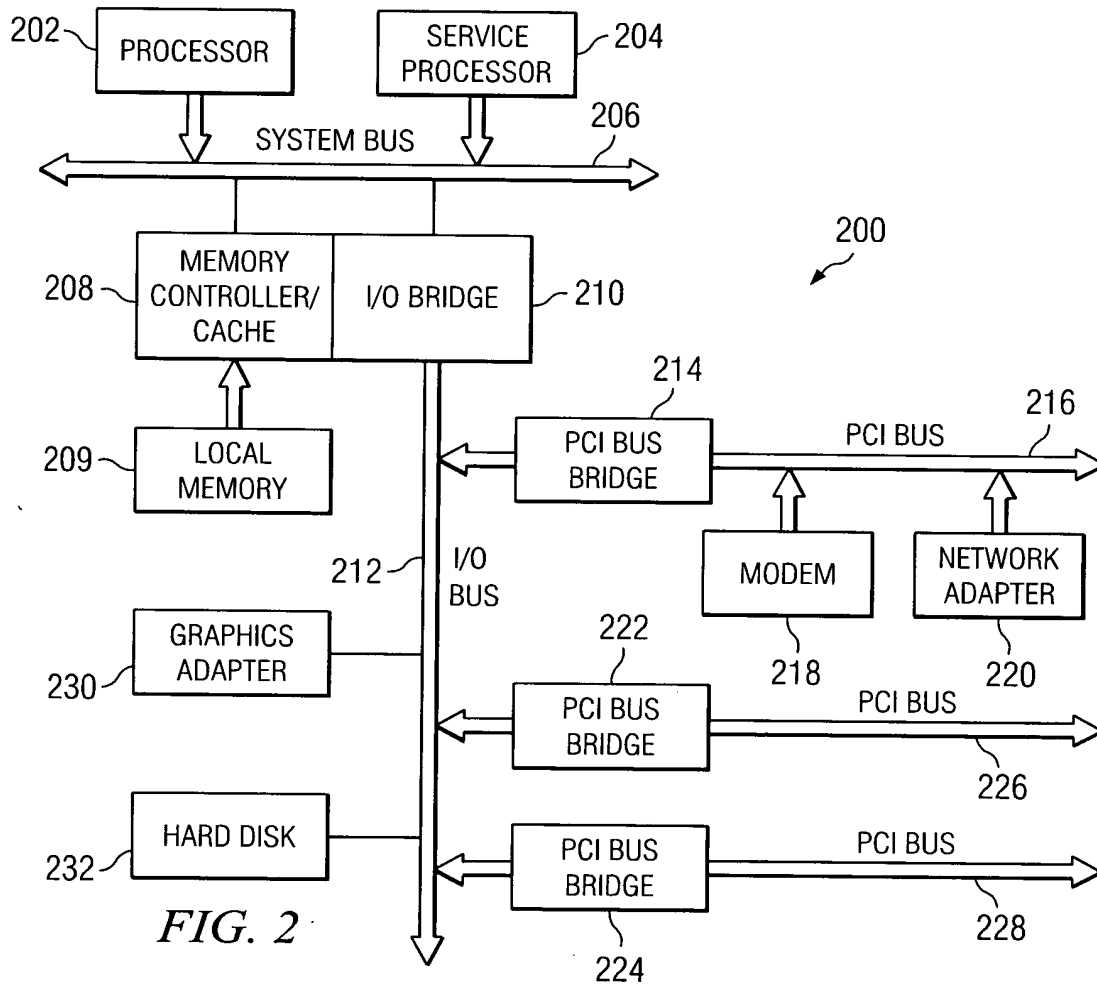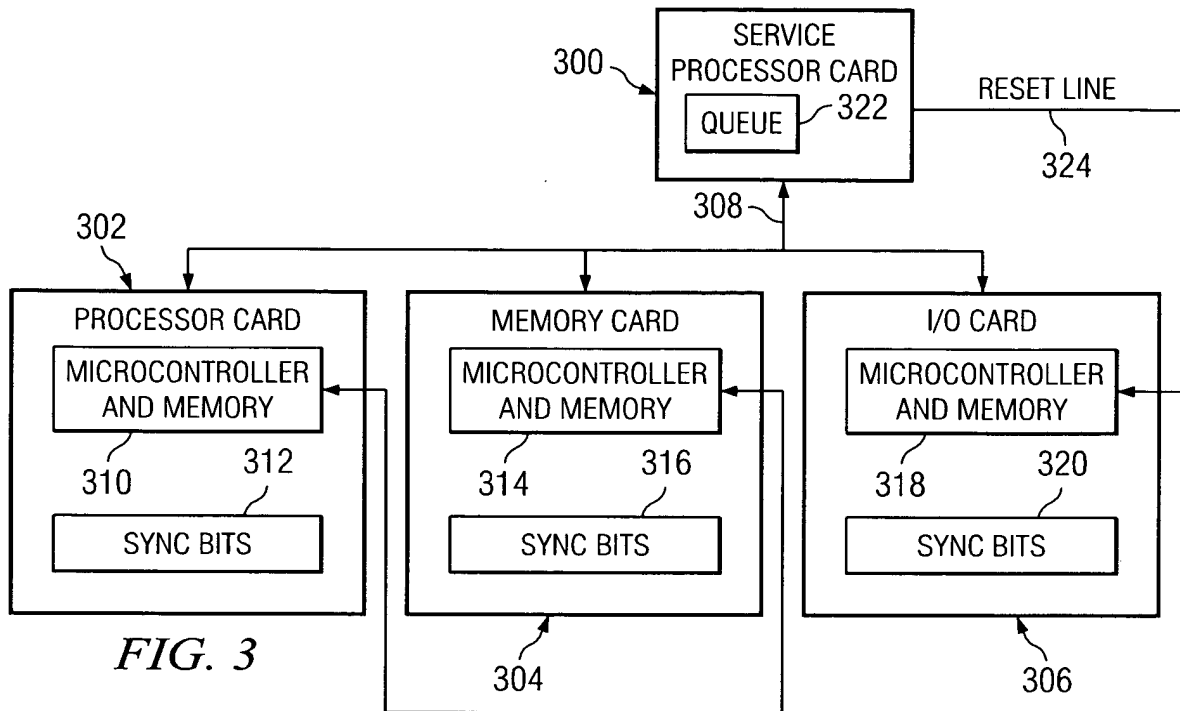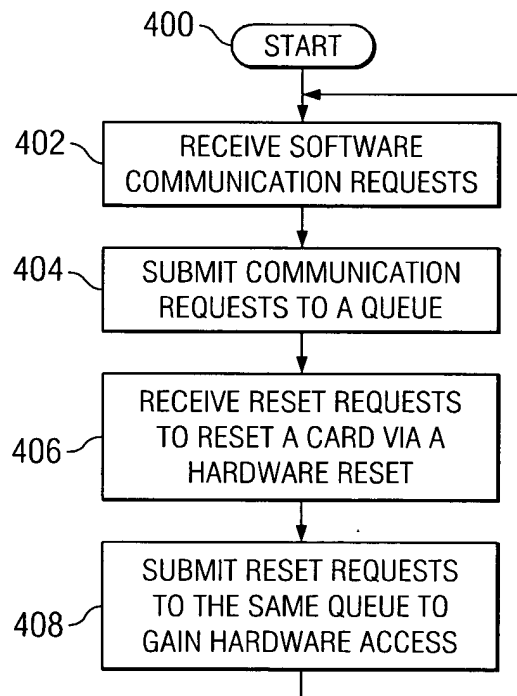Requests in a Software Communication Request Queue
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FIG. 5

500 — (START)

502 — LOOK AT NEXT REQUEST IN QUEUE

504 — IS REQUEST A RESET REQUEST? — NO → 506 START SERVICING REQUEST

YES

510 — ARE ALL CURRENT REQUESTS FINISHED PROCESSING? — NO

YES

512 — ARE ALL REQUEST SEQUENCES FINISHED PROCESSING? — NO → DEQUEUE NEXT REQUEST IN CURRENT SEQUENCE AND PROCESS

513

YES

514 — PROCESS RESET REQUEST CAUSING RESET LINE TO BE PULLED HIGH

516 — GENERATE A RESET IN ALL CARDS CONNECTED TO RESET LINE

518 — ALL CARDS EXECUTE THE RESET CAUSING MICROCONTROLLER AND SYNC BITS TO BE RESET IN EACH CARD

520 — ALL CARDS FINISHED EXECUTING THE RESET? — NO

YES